ProMariner®

Advanced On-Board Chargers

Owner's Manual and Installation Guide

PROTECH-4 SERIES

ADVANCED ELECTRONIC, FULLY AUTOMATIC 4-STEP BATTERY CHARGER

Model	Part No.	Amperage	No. of Banks	Volts
PROTECH 1210	61210	10 Amps	2 Banks	12
PROTECH 1215	61215	15 Amps	3 Banks	12
PROTECH 1220	61220	20 Amps	3 Banks	12
PROTECH 1230	61230	30 Amps	3 Banks	12
PROTECH 1240	61240	40 Amps	3 Banks	12
PROTECH 1250	61250	50 Amps	3 Banks	12
PROTECH 2412	62412	12 Amps	3 Banks	24
PROTECH 2425	62425	25 Amps	3 Banks	24
PROTECH 3218	63218	18 Amps	3 Banks	32
PROTECH 3616	63616	16 Amps	3 Banks	36

IMPORTANT NOTICE

Please save and read all safety, operating and installation instructions before installing or applying AC power to the *ProTech-4* series on-board battery charger.

For all product, installation or service questions please visit www.promariner.com or call ProMariner directly at: 1.800.824.0524 between the hours of 8:30am to 5:00pm (Eastern Time)

200 International Drive, Suite 195 ● Portsmouth, NH 03801 ● (603) 433.4440 ● E-MAIL: info@pmariner.com

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Please read entire manual before installation.

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Introduction

Thank you from all of us at Professional Mariner, LLC and congratulations on the recent purchase of your *ProTech-4* Series On-Board Marine Battery Charger. The *ProTech-4* is the latest in advanced cuddy, cruiser, sail, yacht and commercial on-board marine chargers.

The *ProTech-4* charger incorporates industry leading fully automatic, true 4-step charging providing your batteries with a fast charge while conditioning and extending battery life. This advanced on-board charger has two user-selectable settings, Flooded / AGM or GEL cell.

Standard Features include:

Industry leading package size

The *ProTech-4* Series is the most compact charger of its kind in the industry. More amperage per cubic inch and the ability to mount in any position provide maximum installation flexibility.

Status Indicators

Fast Charge, Absorption, Float, Battery Type

4 – Step Battery Charging

1) Fast Charge – Maximum current output until batteries reach 14.7 volts.
2) Absorption Charge – Timed charge at 14.7 volts – User Programmable
3) Float Charge – Reduce voltage to 13.5 volts
4) Recycle – If a continuous load draws down the battery; charger voltage returns to the high current Fast Charge mode.

World Wide Approval and Certifications

Marine UL 1236/ SA certified IMCI 8846 Ignition protected, and **CE**.

General Safety Instructions PAGE 2

Before connecting to batteries or AC power, read all instructions and cautionary markings on the battery charger and batteries.

CAUTION - To reduce the risk of injury, charge only lead acid type rechargeable batteries (lead acid, sealed lead acid, GEL cell and AGM (Absorbed Glass Matt). Other types of batteries may burst, causing personal injury. The *ProTech-4* series battery charger is factory set for lead acid (flooded) and AGM (Absorbed Glass Matt) batteries. ***Check the position of the battery type selector switch before installation.***

Use of attachments not recommended or sold by Professional Mariner, LLC may result in a risk of fire, electrical shock or personal injury.

Do not operate the charger if it has received a sharp blow, direct hit of force, dropped or otherwise damaged in any way.

Do not disassemble the charger except for replacement of fuse. Call the factory directly when service or repair is required.

Incorrect assembly may result in risk of electrical shock or fire.

To reduce the risk of electrical shock, remove 120 volt or 240 volt AC power from the charger as well as 12,24,32,36 volt DC prior to any maintenance or cleaning.

⚠ WARNING

AVOID SERIOUS INJURY OR DEATH FROM FIRE, EXPLOSION OR ELECTRICAL SHOCK.
- Make connection in an open atmosphere free of explosive fumes.
- Make connection in a secure manner that will avoid contact with water.

WARNING: RISK OF EXPLOSIVE GASES
WORKING IN THE VICINITY OF A LEAD ACID BATTERY IS DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON IT IS OF EXTREME IMPORTANCE THAT EACH TIME BEFORE USING YOUR CHARGER YOU FOLLOW THE SAFETY INSTRUCTIONS PROVIDED IN THIS MANUAL.

To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer, and of any equipment you intend to use in the vicinity of a battery. Review all cautionary markings and labels.

Personal Safety Precautions

Someone should be within the range of your voice or close enough to come to your aid when working near a lead acid battery.

Have plenty of soap and water nearby in case battery acid comes in contact with skin, clothes or eyes.

Never smoke or allow a spark or flame in the vicinity of a battery or engine.

Wear complete eye protection and skin protection. Avoid touching eyes while working with a battery.

If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters the eye flood it with running cold water for at least 10 minutes and get medical attention immediately.

Personal Safety Precautions Continued Page 3

Be extra cautious to reduce risk of dropping a metal tool onto a battery. It may spark or short-circuit the battery which could cause an explosion.

Remove all personal metal items such as rings, bracelets, necklaces, watches, and jewelry when working near a battery. A battery can produce a short circuit high enough to weld a ring or any metal, causing serious burns.

The *ProTech-4* battery charger is **not** intended to supply low voltage electrical systems other than in a marine application. Do not use the battery charger to charge dry cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and property.

Never charge a frozen battery.

Safety Precautions Prior to Charging Batteries

If necessary to remove a battery from a boat to charge, always remove grounded terminal from the battery first. Make sure all accessories in the boat are off, as to not cause an arc (sparking of the connection).

Be sure the area around the charger and batteries is well ventilated while the batteries are being charged. Gases can be forcefully blown away using a piece of cardboard or other nonmetallic material as a fan.

Clean battery terminals with full eye protection to prevent corrosion from coming in contact with eyes.

Add distilled water ***(not tap or bottled water that contains minerals)*** in each cell until electrolyte reaches levels specified by the battery manufacturer. *Do not overfill*. For batteries without caps, carefully follow manufacturer's recharging instructions.

Study all manufacturers' specific precautions before charging, in addition to rates of charge.

General Overview

The *ProTech-4* battery charger will operate from 90 to 270 VAC, 45 to 440 Hz single phase. The charger is designed specifically for the marine environment, with an anodized aluminum case for effective heat dissipation and corrosion resistance. The charger should be permanently mounted in your boat and wired directly to your batteries. Three isolated positive outputs are incorporated to sense and charge three separate heavy-duty batteries or battery banks as needed.

The *ProTech*-4 battery charger is reverse polarity protected and is equipped with two cooling fans for optimum performance. The *ProTech-4* battery charger's fans will not run at all times. The fan will turn on as needed for cooling.

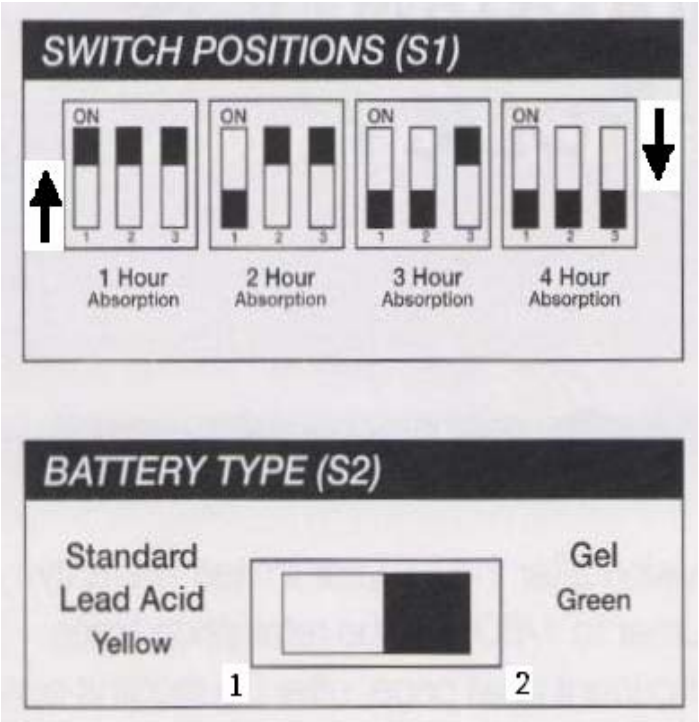
Installation Guidelines Page 4

The charger should be securely fastened with stainless steel screws or through-bolts with lock nuts. Vertical mounting on a bulkhead is preferred, but mounting in any position that allows air to circulate with six inches of clearance space on all sides is required. The *ProTech-4* battery charger operates at ambient temperatures up to 50 degrees C/140 degrees F.

The *Protech-4* has a fuse block on the negative side (30 amp and larger) to protect the charger from reverse polarity. 10, 15 and 20 amp chargers have a reverse polarity fuse located inside the unit.

The 30 amp and larger chargers in the *ProTech-4* family are equipped with an AC input selector switch to change the voltage from 120 volt to 240 volt. *Smaller chargers with less than 30 amp output do this automatically.* (Voltage switch shown below)

Internal switches

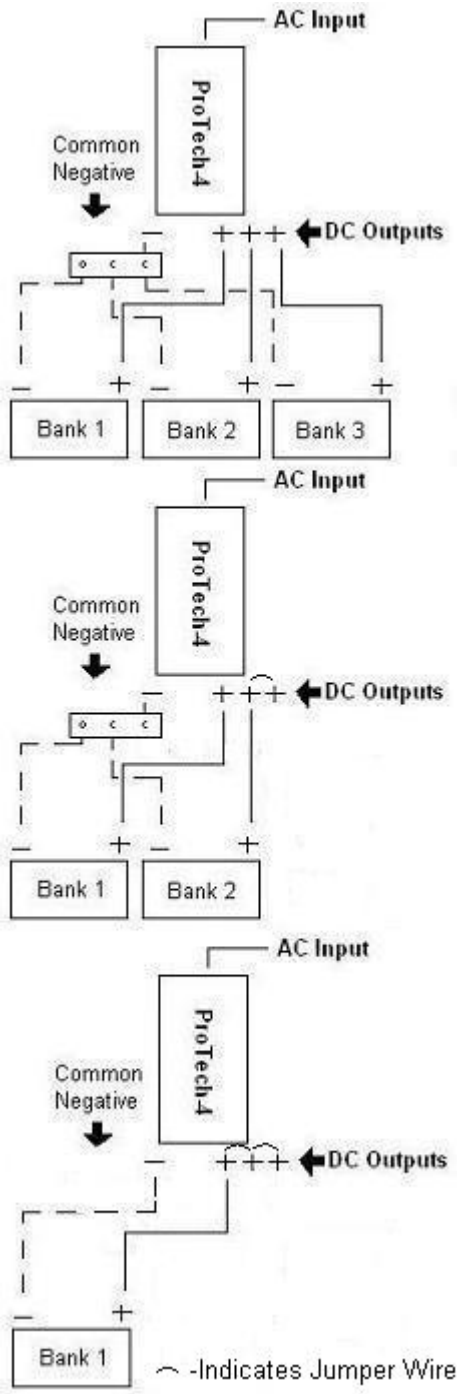


Shown (left) is a diagram for the switch positioning Example: all switches in the up position as shown on the diagram equal 1 hour absorption time.

Actual Switches

Shown (left) is the battery type indicator switch. LED will illuminate Green when set to GEL cell. LED will show Yellow in Lead Acid and AGM (absorbed glass matt) setting. Shown in GEL mode.

Wiring Diagrams



Three Bank Wire Installation

A) Batteries negative wires are run separately to the boats DC bus bar (not provided). Then a single connection is made to the charger.

B) 3 separate negative wires attach to the negative post on the charger.

Two Bank Installation

When wiring a two bank setup you will need to use the **Jumper Wire** provided. The jumper goes on the unloaded positive terminal and connects to an adjacent positive terminal ***(Note: don't leave a terminal post unloaded).***

One Bank Installation

(See above) Use the provided Jumper Wire and create another. We recommend soldered connections and 14 AWG wire. ***(Note: don't leave a terminal post unloaded).***

Wiring Length is round trip

12 volt 30 Amp	**Length**				
Wire length	10'	15'	20'	25'	30'
AWG	10	8	6	6	4
12 volt 40 Amp					
Wire length	10'	15'	20'	25'	30'
AWG	8	6	6	4	4
12 volt 50 Amp					
Wire length	10'	15'	20'	25'	30'
AWG	6	6	4	4	2
24 volt 25 Amp					
Wire length	10'	15'	20'	25'	30'
AWG	12	12	10	10	8
36 volt 15 Amp					
Wire length	10'	15'	20'	25'	30'
AWG	14	12	12	10	10
32 volt 16 Amp					
Wire length	10'	15'	20'	25'	30'
AWG	14	12	12	10	10

******For any other battery configurations or technical assistance please contact Professional Mariner at 1-800-824-0524 or Email us at info@promariner.com***

Installation Page 6

Note: The charger can be mounted horizontally (shown) or can be mounted vertically. Make sure to allow for at least 6 inches clear space around the charger for ventilation.

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1) Make sure to mount the charger in a ***dry*** ventilated location with easy access. Remember to leave plenty of room for battery cables and AC (120 volt or 240 volt) wires.

2) It may be helpful to create a template for mounting or to use the *ProTech-4* as a template for drilling four 1/8" pilot holes. Pilot holes help to prevent the material from cracking or splinting while inserting a screw**.**

3) Battery cable wires should comply with ABYC A-20 standards, more importantly is that each ungrounded DC conductor shall be provided with an over current protection fuse within 7 inches of connection to the DC electrical system or to the battery. The fuse rating should be 10 to 20 amps higher than the rated full output of the charger. Normally protection would be necessary at the charger end of this wire but because the *ProTech-4* series charger is self limiting (can not exceed its rated current output) no fuse is necessary at the charger output. The provided fuse protects the unit against an inadvertent reverse polarity connection.

4) We recommend strain relief on the cables within 6" of the charger for both AC and DC conductors. Connect AC cables to the charger first then, connect DC cables.

5) Be cautious when connecting battery cables to the *ProTech-4* charger and check to make sure AC power is off. ***(Be careful when placing battery cables near one another to avoid possible shorting or arcing (sparking) that can occur when positive and negative wires touch.)***

6) After all cables are in place check connections one last time and make sure all connections are tight and that the charger is located in a dry place. **Water damage will not be covered under the warranty.**

7) Apply power and check to see that the LED lights are lit. If no LED's are observed check shore power AC (120 or 240 volt connections). If LED's are still not lit review the Testing Procedure on (**Page 9)**.

Operation Page 7

When the charger is activated, the YELLOW Fast Mode LED and ORANGE Boost LED will be lit. If lead acid/GEL cell switch is in GEL position, top LED will be GREEN instead of YELLOW. (LEDs shown below)

It is not recommended that you charge different battery types and sizes. The charger is design to charge similar battery types and sizes; any other combination can cause the charger to over or undercharge and is not recommended.

Battery Type	12 volt Absorption and Float voltages	24 volt system	32 volt system	36 volt system
Flooded (Lead Acid)	14.7 Absorption, 13.5 Float	29.4 Absorption, 27.0 Float	39.2 Absorption, 36.0 Float	44.1 Absorption, 40.5 Float
AGM (Absorbed Glass Matt)	14.7 Absorption, 13.5 Float	29.4 Absorption, 27.0 Float	39.5 Absorption, 36.0 Float	44.1 Absorption, 40.5 Float
GEL Cell (Gelled Electrolyte Lead-Acid)	14.1 Absorption, 13.5 Float	28.2 Absorption, 26.6 Float	37.6 Absorption, 36.0 Float	42.3 Absorption, 40.5 Float

LEDs- ***located under access panel on 12 volt DC side***

After the Fast Charge cycle, Absorption time is determined by the position of the three timer switches. (Shown above)

The ProTech-4 battery charger will operate for the selected absorption time whenever AC power is applied.

Full-rated current is available in Float Mode. Voltage will normally be above charged battery voltage at full output.

When the voltage falls below 11.5 volts, or if the AC power is applied, the Fast Charge cycle will start.

Battery charger fan(s) will turn on only as needed to control temperature, the fans will not run continuously unless needed.

Note: for you safety the charger is equipped with an internal temperature sensor that will shutdown the charger in extreme heat.

Battery Types

There are three primary types of batteries in the marketplace today; Flooded (Lead Acid), AGM (Absorbed Glass Matt) and GEL Cell (Gelled Electrolyte Lead-Acid). Traditionally, the most common type of batteries used are Flooded (Lead Acid batteries).

Almost all GEL Cell batteries will state that they are GEL Cell on the battery case or labels.

Battery Type	Charging Profile	Battery Information
Flooded (Lead Acid)	14.7 Absorption, 13.5 Float	Water filled (with or without Removable caps)
AGM (Absorbed Glass Matt)	14.7 Absorption, 13.5 Float	Sealed
GEL Cell	14.1 Absorption, 13.5 Float	Sealed

NOTE: AGM (Absorbed Glass Matt) batteries are not GEL (Gelled Electrolyte Lead-Acid) batteries. AGM batteries are charged at the same charging profile as Flooded (Lead Acid).

*****If you are still unsure as to what kind of battery you have, we recommend that you contact the manufacturer of the battery.**

Caution: When installing a *ProTech-4* battery charger in a vessel with a generator be aware the charger is designed to charge batteries of similar size. Generator batteries are usually significantly smaller potentially causing the charger to overcharge the generator battery. We recommend that the generator battery receive a battery maintainer available from ProMariner **See Accessories Page for information on maintainers or at www.promariner.com**

Charging Information

Dry Mount Chargers					CRUISING AND SAILING					
Model No.	Model Name	Volts	No. of Banks	Total Charger Output	Combined Total Number of Battery Amp Hours*					
					0 - 95	95 - 195	195 - 295	295 - 395	395 - 595	595 - 895
61210	ProTech-4 1210	12 Volt	2 Bank	10 Amp	5 Hrs	10 Hrs				
61215	ProTech-4 1215	12 Volt	3 Bank	15 Amp	3 Hrs	6 Hrs	10 Hrs			
61220	ProTech-4 1220	12 Volt	3 Bank	20 Amp		5 Hrs	7 Hrs	10 Hrs		
61230	ProTech-4 1230	12 Volt	3 Bank	30 Amp		3 Hrs	5 Hrs	7 Hrs	8 Hrs	
61240	ProTech-4 1240	12 Volt	3 Bank	40 Amp				5 Hrs	8 Hrs	11 Hrs
61250	ProTech-4 1250	12 Volt	3 Bank	50 Amp				4 Hrs	6 Hrs	9 Hrs
62412	ProTech-4 2412	24 Volt	3 Bank	12 Amp		8 Hrs	10 Hrs			
62425	ProTech-4 2425	24 Volt	3 Bank	25 Amp		4 Hrs	6 Hrs	8 Hrs	10 Hrs	
63218	ProTech-4 3218	32 Volt	3 Bank	18 Amp			8 Hrs	10 Hrs		
63616	ProTech-4 3616	36 Volt	3 Bank	16 Amp			9 Hrs	12 Hrs		

All ProMariner chargers can be wired in parallel. For example, if you need 100 amps to recharge your batteries, you could run two ProTech 1250's (our 50 Amp Battery Charger) in parallel to get 100 amps (doubling the amperage).

Troubleshooting Page 9

This testing procedure has been provided should you feel your charger is not functioning correctly.

Note: When working with tools near electricity serious electrical shock can occur resulting in injury.

1) Turn off all power to the charger and disconnect all the DC cables at the batteries.

2) Making sure the cables are not touching each other, apply AC (120 volt or 240 volt). The charger should be in either the Fast Charge Mode or the Absorption Charge Mode. Check the voltage between each positive and negative lead voltage should be 14.7 volts (for lead-acid batteries) or 14.1 (for GEL cell batteries).

3) If the voltage is correct keep the charger powered up but disconnected from the batteries for the allotted number of hours as set by the (S1) dipswitches (**shown on Page 11**) The green LED should be illuminated. Recheck the voltage; it should be 13.5 volts Lead Acid and 13.5 volts for GEL from each positive lead to the negative lead.

4) If you see all of the above, your charger is most likely working correctly.

5) If you don't see the initial 14+ volts, the charger either has a blown fuse, or circuit board failure. Turn off AC power; remove the small cover and the large cover with the fan. The fan and the AC (120 volt or 240 volt) terminal block are attached to the main circuit board. There is a glass cylinder fuse (AC fuse) if it is blown replace it (the fuse says 250 volts—-however if your boat doesn't leave the United States and is a 30 Amp service. It can replace with a 120 volt same amperage fuse. If it blows a second time then a circuit board failure has occurred.

Professional Mariner Customer Service 1-800-824-0524 or Email info@pmariner.com

AC FUSE

Periodic Maintenance Guide Page 10

Process: Per battery manufactures instructions monitor and maintain proper levels of **distilled** water ***(not tap or bottled water that contains minerals)*** in each battery.

When: Monthly

Process: Clean and tighten all battery connections. Follow battery manufacturer's instructions for cleaning a battery. Clean all battery terminals with a wire brush where required and tighten all battery connections.

When: Monthly

Process: Visually inspect all wiring for cuts and abrasions. Contact ProMariner if charger needs to be serviced.

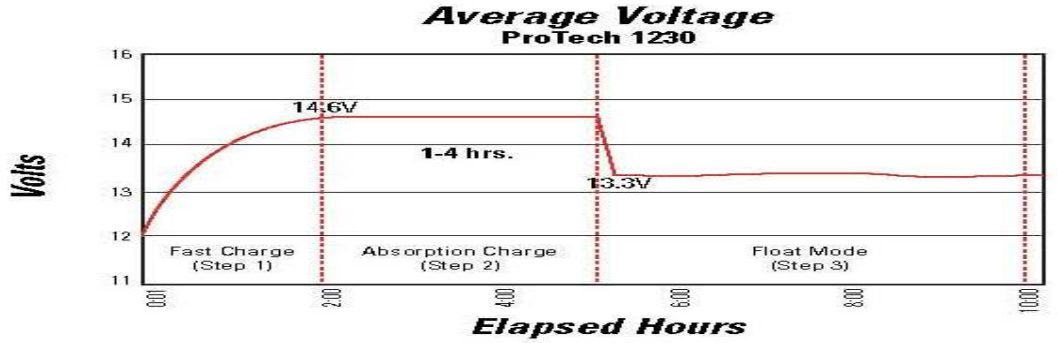
When: Monthly

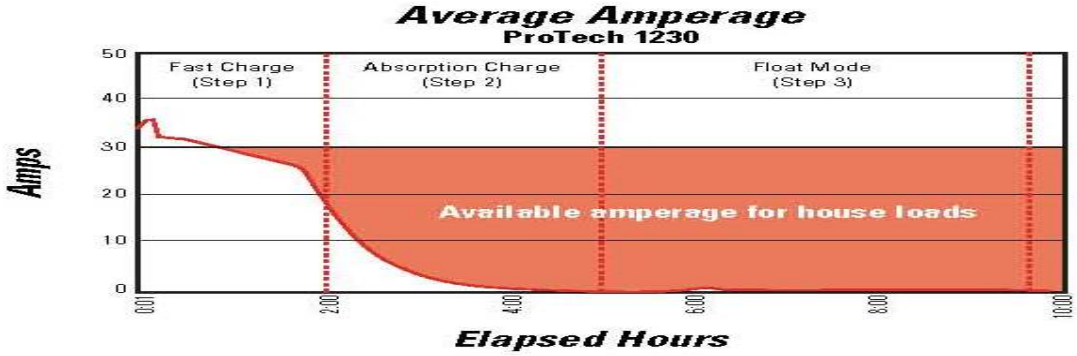
Process: Check charger for water damage

When: Monthly

Technical Information

Advanced Electronic Technology



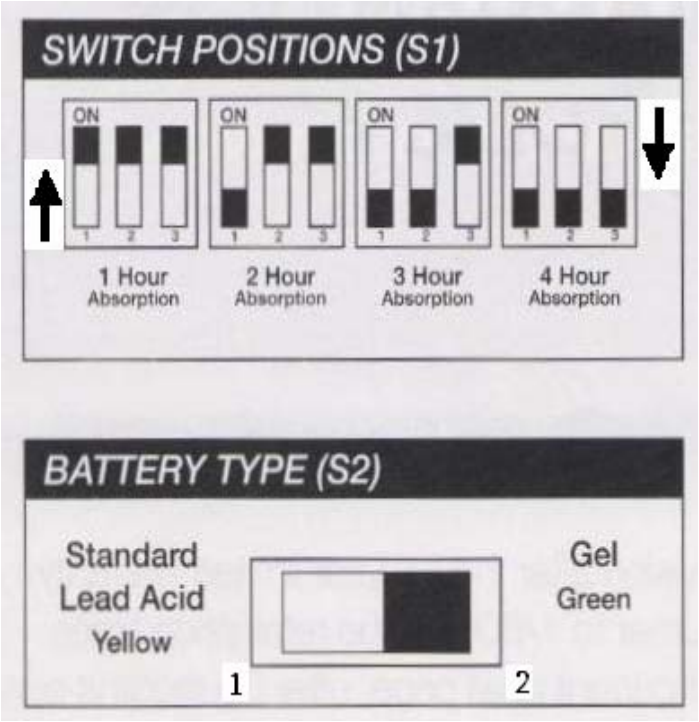


Technical Information Continued Page 11

No LEDs
The charger appears to have a series of LED lights on the outside in plan view. This is not the case; the charger actually has a viewing hole on the battery connection side. The LED's will only light up when the unit has AC (120v or 240v) power.

GEL Cell charging mode
First, make sure that the charger is off and has no power. By removing the small cover where the battery cables are located observe the black switch with two positions, position 1 is for Lead Acid batteries and AGM (Absorbed Glass Matt). Position 2 is for GEL cell batteries. The *Protech-4* is also equipped with an indicator light that illuminates yellow for Lead Acid /AGM and Green for the GEL cell setting.

External Fuse Box
The fuse box outside the charger with a yellow cable attached is for negative DC (12 volt) reverse polarity protection, design to protect the charger from reverse polarity (reversing negative and positive wires) this feature protects the charger from damage.



Shown (left) is a diagram for the switch positioning Example: all switches in the up position as shown on the diagram equal 1 hour absorption time.

Actual Switches

Shown (left) is the battery type indicator switch. LED will illuminate Green when set to GEL cell. LED will show Yellow in Lead Acid and AGM (absorbed glass matt) setting. Shown in GEL mode.

*** When changing the configuration of the charger make sure ***AC power*** *is disconnected.*

Q: *Do I have GEL Cell batteries?*
A: The best way to determine is to look at the battery housing and see if it is identified as a GEL battery. If you don't know contact the manufacturer of the battery.

Q: *I am not having any LEDs illuminate?*
A: (Note that there are no LEDs on the front of the charger, they are located under the access panel on the 12 volt DC side). 1) Check to make sure there is AC power connected. **2)** Disconnect AC power, check the AC fuse inside the charger located underneath the cover; being careful when removing large access plate (fan wire attached). On the AC (120 volt or 240 volt) side of the charger you will find the small cylinder style fuse. Replace the fuse with the same amperage fuse and then apply AC power. If problem still exists contact Professional Mariner 1-800-824-0524.

Q: *Will water hurt my charger?*
A: Yes, these are dry mount chargers and are intended to be mounted in a dry location. Professional Mariner does not warranty water damaged chargers.

Q: *How do I change my charger into GEL cell mode?*
A: Please double check that you have GEL cell batteries. There is a misconception that AGM is GEL. This is **not** the case. AGM (Absorbed Glass Matt) batteries charge at Lead Acid levels. Remove the access cover on the (12 volt) DC voltage end and switch the black toggle switch to position 2 the green LED will illuminate to indicating that the charger is in GEL cell mode.

Q: *Is it ok to mount my charger on carpeting?*
A: Yes, in most cases this is not an issue we recommend mounting the charger to a board first. Proper ventilation must be maintained.

Q: *Do the chargers really need 6" clearance for ventilation?*
A: We recommend this for cooling and even more is better.

Q: *I think my charger is too hot. What should I do?*
A: The charger will get to the point where it can be touched, but you would not want to carry it across a room. This is normal. ***Note:*** *the charger is thermally protected.*

Q: *I have 3 output posts and 2 batteries?*
A: Using the provided jumper wire connect the unused post to a post which is connected to a battery. This will allow the charger to perform correctly and distribute power more effectively. (See wire diagrams on Page 9).

Q: *I have 3 positive posts and 1 battery?*
A: (See above) Make another jumper wire using 14 AWG wire and solder the ring terminals on to the wire.

Q: *What are the voltage requirements and how can I change the voltage from 120v to 240v?*
A: The *ProTech-4* Series battery charger is set to work at 120 volts but can be switched to accept 240 volts. **Note:** that ProTech-4 battery chargers less than 30amps automatically adjust for correct voltage. The switch is located on the AC side of the unit and is a slide switch that indicates the voltage level either 120v or 240v. The charger will operate from ***90 to 270 Volt AC***, 45 to 440 Hz single phase.

Frequently Asked Questions Continued Page 13

Q: What is the recommended absorption time?
A: The simple rule of thumb is: the larger the battery bank, the longer the absorption time. We suggest the following

Single Group 24 or Group 27……2 Hours
Two Groups 24, 27 or Single Group 31……3 Hours
Single 4D or 8D……4 Hours
Multiple 4 or 8Ds of Multiple 6 V……4 Hours

Optional Accessories

Optional Battery Bank Status Monitor
See your local dealer or retailer for the ProMariner Remote Battery Bank Status Monitor. The Remote Monitor is easy to install and connects directly to your boats batteries. Once installed simply hold down the "Push-To-Test" button and observe the charge level indicator for each battery. (Up to 3 batteries can be monitored). Note: AC power and the boats engine must be off when using the Remote Battery Bank Status Monitor.

Model	Part no.	cable size	volts	banks
Handheld DC System Tester	**87710**	**n/a**	**n/a**	**n/a**
Digital Multi-Meter	**60016**	**3'**	**12**	**3**
ProSport 1.5 Portable	**10115**	**4'**	**12**	**1**
ProSport 1.5 On-Board	**10116**	**4'**	**12**	**1**
Clamp-It Multimeter	**87015**	**n/a**	**n/a**	**n/a**
ProSafe 1 Single Line Galvanic Isolation System	**22086**	**n/a**	**120**	**n/a**
ProSafe Isolation Transformers 3.6-12KVA	**n/a**	**n/a**	**120/240**	**n/a**
Adjustable Corrosion Monitoring System	**22020**	**n/a**	**n/a**	**n/a**
Corrosion Monitoring System	**22030**	**n/a**	**n/a**	**n/a**
Corrosion Workbook	**20001**	**n/a**	**n/a**	**n/a**

Customer Service & Warranty Page 14

We are committed to customer satisfaction and value your business. If at any time during the warranty period you experience a problem with your ProTech-4 Series On-Board Marine Battery Charger call us at 1-800-824-0524 or email info@promariner.com for technical support.

WARRANTY CARD CAN BE REGISTERED AT WWW.PROMARINER.COM

PROTECH-4 SERIES ON-BOARD MARINE CHARGER
1 YEAR FREE REPLACEMENT GUARANTEE

Each ProMariner *ProTech-4* Series Model is guaranteed against defects in material and workmanship to the original purchaser in normal use for one full year after purchase.

Each serial numbered product has an additional repair adjustment provision after the year limited warranty that limits the maximum charge for a factory repair to the original purchaser to 1/60 of the list price times the months after purchase (minimum 12) or up to 50% of the list price, after 30 months service, plus shipping.

- Warranty and repair adjustment calculated from manufacture date if not registered or proof of purchase within two weeks of sale.
- Warranty void if unauthorized repairs attempted.
- Customer is responsible for shipping damages to ProMariner.
- Cosmetic repairs are done at the owner's request and expense.

Purchase or other acceptance of the product shall be on the condition and agreement that Professional Mariner, LLC SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.) This warranty is made in lieu of all other obligations or liabilities on the part of Professional Mariner. Professional Mariner neither assumes nor authorizes any person for any obligation or liability in connection with the sale of this product.

To make a claim under warranty, go to www.ProMariner.com and click on the support tab and follow the instructions making sure to identify the product and the problem. Professional Mariner will make its best effort to repair or replace the product, if found defective within the terms of the warranty, within (30) days after return of the product to the company. Professional Mariner will ship the repaired or replaced product back to the purchaser.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty is in lieu of all others expressed or implied.

Factory Service Center & Technical Offices
Professional Mariner, LLC
200 International Drive, Suite 195
Portsmouth, NH 03801
Tel: **1-800-824-0524** www.ProMariner.com

ProTech-4 Series On-Board Marine Charger
Tel: (603) 433-4440 / Fax: (603) 433-4442

►Visit ProMariner Online at www.promariner.com, for a Complete Selection of Quality Marine Products...

Here are just a few:

►ProMite Series - Standard Edition Waterproof Marine Battery Chargers

►ProSport Series - Recreational Sport Fishing & Boating Waterproof Marine Battery Chargers

►ProTournament Series - Professional Grade Tournament Waterproof Marine Battery Chargers

►Advanced 4 Step Dry Mount Marine Battery Chargers

►Battery Maintainers

►AC Plug Holders

►Battery Isolators

►ProSport Cup Holder Inverters

►Pro Inverters

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